2021

A Systematic Review of Open Access Institutional Repositories (OAIRs)

Sumeer Gul Dr
University of Kashmir, J & K, India, sumeersuheel@gmail.com

Nahida Tun Nisa Dr
Amar Singh College, J & K, India, nahidatn@gmail.com

Farzana Gulzar Dr
University of Kashmir, J & K, India, farzanashahrukh@uok.edu.in

Shazia Bashir Dr
Jammu & Kashmir Academy of Art, Culture & Languages, J &K, India, jkshaziabashir@gmail.com

Asif Khan Dr
Central University of Kashmir, J & K, India, drasifk11@gmail.com

See next page for additional authors

Authors

Sumeer Gul Dr, Nahida Tun Nisa Dr, Farzana Gulzar Dr, Shazia Bashir Dr, Asif Khan Dr, and Aadil Bashir Dr

A Systematic Review of Open Access Institutional Repositories (OAIRs)

Authors
Dr. Nahida Tun Nisa
Senior Assistant Professor, Department of Botany, Amar Singh College, J & K, India.
*Dr. Farzana Gulzar**
Senior Assistant Professor, Department of Management Studies, University of Kashmir, J & K, India.
Dr. Shazia Bashir
Publication Officer, Central Library, Jammu & Kashmir Academy of Art, Culture & Languages, J & K, India
Dr. Sumeer Gul
Associate Professor, Department of Library & Information Science, University of Kashmir, J & K, India.
Dr. Asif Khan
Senior Assistant Professor, Department of Convergent Journalism, Central University of Kashmir, J & K, India
Dr Aadil Bashir
Senior Assistant Professor, Department of Social Work, University of Kashmir, J & K, India.

Abstract

The article tries to explore the existing literature on Open Access Institutional Repositories (OAIRs) so that the existing developments can be identified and research gaps can be investigated. This structured review was carried out with the aid of three indexing databases, Web of Science, Scopus, and Google Scholar. Different search terms showcasing multiple dimensions of OAIRs were executed across the three databases. After eliminating the duplicate records, the papers were scanned for final review. The paper tries to highlight the status, content management policies, and Web 2.0 use/ Interactive features of the OAIRs. How the OAIRs are used by academia is also a highlight of the paper. The paper also focuses on the studies that showcase the awareness of the users using the OAIRs. Furthermore, the studies featuring the problems, and challenges have also been incorporated. Studies that focus on the factors and motivators in the use of OAIRs also form a part of the paper.

Keywords: *Open Access repositories; Open Access Institutional Repositories (OAIRs); Institutional repositories; Open access*

Introduction

The buzz in the Open Access (OA) market, i.e., Open Access Institutional Repositories (OAIRs) are researched due to the enormous benefits accrued from them in the academic

---

* *Dr Farzana Gulzar is the corresponding author and can be contacted at: farzanashahrukh@uok.edu.in*

world. The present paper reviews the studies highlighting various dimensions of OARs ranging from their evaluation to use.

The paper bifurcates into two parts:

Part I reviews the studies reflecting the evaluative parameters of OARs including the institutional ones. **Part I** is further subdivided into three parts which encompass studies covering the following aspects of OARs:

- Part A: Status
- Part B: Content management policies
- Part C: Web 2.0 use/ Interactive features

Part II revolves around the studies which showcase the use of OAIRs and is also subdivided into two categories:

- Part A: Type of content deposited
- Part B: Awareness/problems/challenges/factors and motivators in the use of IRs

Part I

Various studies have been conducted that showcase the status of the OAIRs.

- **Part A: Evaluation**

Van Westrienen and Lynch (2005) have found that *"articles"* dot majority of the IRs followed by *"theses"* and *"books* with *DSpace* and *EPrints* as the prioritized software for IR development. They have also found that "support for standards related to harvesting, notably the Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH) seems widespread". **Rodríguez Bravo and Luisa Alvite Díez (2007)** have provided an overview of open access collections operating in the repositories in Spain. The study tries to examine the tools, type of content, coverage, and aims of the digital research collections generated by Spanish academic bodies. They found that the content enriching the repositories is diverse ranging from journal articles to theses and scientific literature. They also found diversity in terms of software used in the development of IRs. The study also tries to highlight the quantitative scores of the items archived in the repositories. **Ahmed and Rather (2007)** have explored the Indian OA digital repositories and found that majority of them use English as the main language and *"D-Space"* being used as the core software for digital content management. Half of the repositories studied were OAI-PMH compliant with diversity in the content number also. *"Publications"* are the main type of content hosted in the OARs followed by *"conference proceedings"* and

"theses". **Mittal and Mahesh (2008)** have identifiedand evaluated the collections within digital libraries and repositories in India available in the public domain. The results of the study indicate that "use of open-source software especially for the creation of institutional repositories is found to be common. However, major digital library initiatives such as the Digital Library of India use custom-made software. The collection size in most digital libraries and repositories is in a few hundreds". **Brown and Boulderstone (2008)** also highlight the growing trend of IRs. **Lone, Rather and Shah (2008)** while studying the patternof OARs in India reveal that "*articles", "conference papers"* and *"theses"* outscore other archived content in the OA repositories. The content number also shows diversity with the majority of the repositories in the English language. **Bhat (2009)** while examining the OARs in the field of Computer Science and Information Technology found that *EPrints* is the most widely used software for the managementof digital content in the repositories. **Ghosh (2009)** "examines the developments in ETD repositories, in particular, Ph.D. thesis repositories, in India. The author looks at the current state of deployment of ETD repositories in the academic sector and discusses the subject coverage, number of items, access policy, browse/search option, and value-added services". The subject coverage and number of items varies from one repository to another thus reflecting diversified subject and item platforms. *DSpace* stays a prioritized software for repository development. **Wani, Gul and Rah (2009)** have studied the growth and development of OARs at the global level with stress on Asian repositories. At the global level, they found that *"journal articles", "conference proceedings"* and *"unpublished reports and working papers"* enrich the archived content in OARs at top positions with the majority of the repositories of *"operational"* nature. *"DSpace", "EPrints"* and *"Bepress"* remain the prioritized software for the management of digital content with a huge score of repositories of *"institutional"* nature followed by *"disciplinary", "aggregating",* and *"governmental"* repositories. English remains the main content language in the OARs followed by German and French. **Xia and Opperman (2010)** confirm the use of *"DSpace"* as the main digital management software for managing the digital content followed by *"Bepress"* and *"EPrints"*. The size of IRs also varies by the number of content deposits. **Abrizah, Noorhidawati and Kiran (2010)** while highlighting the state of OARs of Asian universities in terms of types, contents, disciplines, language, technical and operational issues found that majority of the archived digital content are *"journal articles", "theses and dissertations"* and *"unpublished reports and workshop papers"*. As for the language of the collections in IRs, the most

widely used language is English followed by Japanese and Chinese. *"DSpace"* and *"EPrints"* are the most widely used software in the OARs. A huge score of repositories is *"Institutional"* in nature followed by *"disciplinary"*, *"aggregating"* and *"governmental"* repositories. The majority of the repositories are functional with a very less score on a trial basis and broken. Variation in the record count is also seen in the repositories. **Tripathi and Jeevan (2011)** provide an overview of digital libraries and IRs in India by evaluating their features. The study reveals that "most of the institutions studied digitally archive post-prints and preprints of *research publications, annual reports, theses,* and *institutional publications* in their IR". The repositories hold a variety of content ranging from *"theses and dissertations to preprints"*, *"post-prints"*, *"working papers"*, *"conference papers"*, *"annual reports"*, and *"technical reports"*. *D-Space* and *E- Prints* remain a priority for managing the digital collection in the IRs. **Li and Banach (2011)** studied the digital preservation policies among Association of Research Libraries (ARL) member institutions and found that *DSpace* is preferred for the management of digital content in the IRs followed by *Digital Commons, Content DM,* and *DigiTool*. **Wacha and Wisner (2011)** while measuring the value in OARs find that majority of the repositories have *"articles"*, *"multimedia"* and *"theses"* as the main digital content embedded in them. **Nicholas, Rowlands, Watkinson, Brown and Jamali (2012)** observe the growth of IRs much higher in comparison to other repository types. **Nyambi and Maynard (2012)** "determine that the prevalent content on IRs is the *journal articles, conference papers, university projects, ETDs,* and *past examination papers*". Researching the OARs, **Burns, Lana and Budd (2013)** have found *"journal articles"*, *"theses and dissertations"* and *"presentations (PPT)"* as the main content archived in the repositories. "**Ali, Jan and Amin (2013)** also report about the status of OARs by giving their global picture using the parameters like geographical distribution, software usage, language diversity, operational status, repository type, and subject coverage. The authors confirm the use of *D-Space, E-Prints,* and *Digital Commons* for the management of digital content in the OARs with an increasing growth rate of *DSpace* and *EPrints*. The study further approves that majority of the OARs are functional with a less score on a trial basis and a very meager score which reflects and closed or broken status. IRs outscore the rest of the repository types followed by *disciplinary, aggregating,* and *governmental* ones. *"Journal articles", "theses and dissertations"* and *"unpublished reports and working papers"* are the prioritized content type archived in the OARs. English remains a prioritized language in terms of content enrichment followed by

Spanish and German. **Roy, Biswas and Mukhopadhyay (2013)** have researched the global visibility of Indian open access institutional digital repositories "in terms of content types, repository type, number of records, software used, disciplines covered, languages, technical and operational issues, and policy matter". The authors have found a good score of repositories that are OAI-PMH compliant with the majority of the repositories hosting "*journal articles*", "*conference and workshop papers*" and "*theses and dissertations*". The majority of the repositories were "*institutional*" in nature. English tends to be the dominating content language in the OAR's. The software used for the management of digital content is dominated by "*DSpace*" and "*EPrints*". **Ahmed, Alreyaee and Rahman (2014)** "trace the growth and development of online e- theses repositories in Asia. The authors try to "discover the composition of ETD repositories in Asia based on the seven key parameters, i.e., country, types, language, disciplines, software, content types, and repository policies". The findings of the study reveal that the growth pattern is on increase with Japan, India, and China among the top contributors. *"English"* stays the preferred content language in the repositories followed by "*Chinese*" and "*Japanese*". The repositories have the content in the form of *"e-theses", "journal articles", "conference papers", "unpublished work", "books",* and *"datasets".* "*DSpace*" and "*EPrints*" remain a priority for the management of digital content in the repositories. The study also reveals that the majority of the repositories are *"operational"* with a less score in the *"non-operational"* and *"trial"* category. **Pinfield *et al.* (2014)** assess the worldwide growth of OA repositories from 2005 to 2012. The authors confirm that repositories are "predominantly *institutional* and the majority of the repositories have resources in *the English* language. They typically use the open-source OAI-compliant software". The study witnesses a promising growth of the OARs with *"journal articles", "theses and dissertations"* and *"unpublished reports and working papers"* as the main content archived in repositories. *DSpace, EPrints,* and *Digital Commons* stand out from the crowd in terms of software used for the management of digital content in the OARs. **Kim and Lee (2014)** highlight the global data repository status in Korea, China, and Japan, based on operational status, language, content type, subject area, amount of repository content, and repository software. The findings confirm the *"institutional"* repositories in lead followed by *"disciplinary", "aggregating"* and *"governmental"* repositories respectively with English as the dominating resource language. *DSpace, EPrints,* and *Digital Commons* tend to be the "most widely utilized repository system". **Loan (2014)** has studied the status of Asian digital OARs in terms of geographical

output, language, subject, content type, and software use. The findings of the study reveal that Japan, India, and Taiwan are among the top contributors in terms of OARs with English as the predominant content language. *"Institutional"* repositories are in lead followed by *"disciplinary", "aggregating"* and *"governmental"* ones. *"Articles"*, *"theses"* and *"conferences"* are hosted by the majority of the repositories with *"DSpace"* and *"EPrints"* as the prioritized software. **Bhat (2014)** while studying the research data in Indian institutional repositories found that majority of the repositories have *"journal articles"* archived as digital content followed by *"conference papers/ proceedings/ posters/workshop items"* and *"theses". "DSpace"* and *"EPrints"* remain a priority for the management of digital content. **Ezema and Okafor (2015)** found that *"ETDs", "journal articles", "conference proceedings", "faculty or departmental journals", and "inaugural lectures"* are the most prevalent content in IRs. **Raju, Raju and Claassen (2015)** find "prevalent content in the IRs to be a tie between *ETDs* and *articles* followed by *chapters in books, conference papers,* and *inaugural lectures*, respectively" **Singh (2016)** confirms the high use of *"DSpace"* and *"EPrints"* software for the creation of repositories with a predominance of IRs having an operational status. The size of the repositories in terms of content also varies with *"journal articles", "conference proceedings"* and *"unpublished literature"* in high scores dotting the content in OARs. The majority of the repositories have content in the English language. **Singh (2016)** ascertains that a good score of OARs uses OAI-PMH protocols for data harvesting. **Loan and Sheikh (2016)** while conducting an analytical study of OA health and medical repositories reveal that *"institutional"* repositories predominate the OAR landscape followed by *"disciplinary", "aggregating"* and *"governmental"* ones with English as the dominating resource language followed by Spanish and Japanese. Monolingual content is present in the majority of the repositories followed by the ones having the content in two languages with a lesser score of repositories of multilingual nature. The content score in repositories shows diversity with *"journal articles", "theses"* and *"unpublished documents"* in a higher score in terms of the content archived in them. A huge score of repositories is OAI-PMH compliant with *"DSpace", "EPrints"* and *"Digital Commons"* as the main software used with the majority of the repositories functional in nature. **Ukwoma and Okafor (2017)** have studied the trends and development in the IRs of Nigerian universities. *"Theses and dissertations"* outscore the archived content in the repositories followed by *"journal articles"* and *"conference proceedings". DSpace, EPrints, and Joomla* remain the prioritized software for the management of the content in

the IRs. **Bangani (2018)** observes *ETDs* as the main content deposited to IRs with "*journals, journal articles, and conference proceedings* quickly catching up. Other common collections were *memorial lectures, discussion papers, library newsletters, university calendars, and graduation ceremonies, university management collections, media coverage, events, research data, policy briefs, university communiqué,* and *audio collections*". **Elahi and Mezbah-ul-Islam (2018)** while researching the OARs in Bangladesh observed that there is slow progress of OARs with most of the repositories of institutional nature. They also observed a smaller number of contents populating the repositories with India and Bangladesh in the lead from the South Asian region in terms of repository count. *Greenstone* and *DSpace* remain the prioritized software for repository development and a majority of the repositories are functional in nature. The main content populating the Bangladeshi repositories include "journal articles" followed by *"theses and dissertations", "unpublished reports", "working papers"* and *"conferences and workshops"*. They also found that 50% of the repositories are OAI-PMH compliant.

- **Part B: Content management policies**

Joint (2006) highlights "some unresolved questions about the practical implementation and management of IRs – in particular, the level of resource needed to support the process of self-deposit into IRs". The study finds that "metadata creation and the formulation of digital preservation policies for institutional repositories require a significant resource if they are to be carried out well". **Bhat (2009)** also evaluated the content management policies, preservation policies, and rights management in OARs in the field of Computer Science and IT. He found that majority of the repositories follow a *"collection policy"* for the selection of content; well defined *"submission policy"* and *"preservation policy"*. Almost all the repositories have a *"feedback"* option with only one repository providing access to *"user statistics"* and some provide access on a request basis and the others don't provide access to the same. **Abrizah, Noorhidawati and Kiran (2010)** have studied the content management policies of OARs in Asian universities and found that a huge score of the repositories has an *'undefined' policy for content submission and preservation* with a meager score of repositories having a *defined "recorded content policy", "recorded submission policy"* and *"recorded preservation policy"*. *"Recorded metadata re-use policy"* and *"recorded full-text data re-use policy"* are also reflected in a low score of repositories. Evaluating the digital libraries and IRs in India, **Tripathi and Jeevan (2011)** have found a meager score of libraries offering the

usage statistics and feedback. **Li and Banach (2011)** have confirmed that almost half of the institutions studied by them had a defined preservation policy and there has been an increase in digital preservation policy development. 80% of the IRs also confirm a collection policy in place. **Roy, Biswas and Mukhopadhyay (2013)** have found that content management policies (Metadata Re-Use Policy; Data Re-Use Policy; Content Policy and Submission Policy) are prominent in the repositories with a weaker status in terms of preservation policies. **Ahmed, Alreyaee and Rahman (2014)** have also identified that the majority of the repositories have an un-defined policy for content submission and preservation. "A small percentage of ETD repositories have defined recorded content policies, recorded submission policies, and recorded preservation policies. Regarding full-text data re-use policies and metadata re-use policies, the number is also low. **Singh (2016)** has also researched that majority of the repositories don't have their digital management policies defined. **Elahi and Mezbah-ul-Islam (2018)** have also witnessed a weaker status of OARs in Bangladesh in terms of content management policies.

- **Part C: Web 2.0 use/Interactive features**

Earnshaw and Vince (2007); Jones (2007) have visualized the Web 2.0 services implemented by IRs. **Wood (2007)** visualizes the phenomenon of tagging in IRs. **Brown and Boulderstone (2008)** highlight the growing trend of institutional repositories and have observed the other vehicles which adopt the OA principle are also mushrooming with them which include blogs, wikis, podcasts, and RSS feeds. The use of RSS and blogs to broadcast the repository content has also been researched by **(Primary Research Group, 2008)**. **Megrey and Moksness (2009); Mendes and Brasileiro (2007); Weenink, Waaijers, Godtsenhoven, DRIVER & Stichting SURF (2008); Sicilia and Lytras (2009)** have also studied the use of RSS feeds by European repositories. **Littlejohn and Pegler (2007)** have discussed the use of RSS alerts and instant messaging in repositories. The use of Web 2.0 applications like wikis, blogs, podcasts, etc. for managing the digital content in IRs has been highlighted by **Jones and American Library Association (2009)**. **Cocciolo (2010)** researched enhanced community participation in an IR using the Web 2.0 approach. **Ozek (2011)** is of the view that Web 2.0 offers a set of slants for establishing systems that help encourage community involvement in IRs. Web 2.0 applications in housing repositories of skills and institutional knowledge, has been researched by **Livingston (2010)**. **Shafi, Gul and Shah (2013)** provide an overview of OARs that have embraced Web 2.0 technologies. The

main focus of the study was to explore the occurrence of Web 2.0 tools used in open repositories. The study confirms the use of Web 2.0 tools in repositories with Really Simple Syndication (RSS) being used by the majority of the repositories followed by Social Bookmarking and Atom Syndication. **Shueb and Sofi (2014)** highlight the web 2.0 interactivity in the OARs and find that more than 60% of the repositories are Web 2.0 enabled with RSS as the main Web 2.0 tool incorporated in the repositories followed by Facebook and Twitter correspondingly while as podcasts and wikis are least in use.

Part II

Use of IRs

The value and use of IRs as platforms of scholarly dissemination have been confirmed by several studies.

- **Part A: Type of content deposited**

Kim (2007) highlights that authors populate the IRs by pre-refereed articles, refereed and published articles, unrefereed articles (technical reports or working papers), book chapters, datasets lecture notes, conference presentations, software, software documentation, images, dissertations and theses, audio/video recordings and course syllabi. **Tripathi and Jeevan (2011)** report that authors usually "archive post-prints and preprints of research publications, annual reports, theses, and institutional publications in their IRs". **Owen (2011)** has also reported that authors prefer to submit *"articles", "grey literature"* and *"graduate & undergraduate research"* to IRs. **Nicholas, Rowlands, Watkinson, Brown and Jamali (2012)** also report that *"journal articles"* and *"e-theses"* are the types of documents mostly deposited in IRs followed by conference papers, technical reports, working papers, research datasets, book chapters, books/monographs, computer software, video recordings, patents, images or photographs, and metadata-only record respectively.

- **Part B: Awareness/problems/challenges/factors and motivators in the use of IRs**

Christian (2008); Nwokedi (2010) report "lack of awareness or ignorance, fear of plagiarism, constant power failure, copyright issues, server unavailability and lack of time" as the major barriers to the use of IR. **Cullen and Chawner (2011)** report that faculty and IR staff workload and lack of awareness tend to be the factors that hamper authors from submitting their works to IRs. A low deposition in IRs of India is also witnessed by **Tripathi and Jeevan (2011)** and **Kamraninia and Abrizah (2010)** but **Kamraninia and Abrizah (2010)** feel that the active role of librarians in the repository

development and marketing improves the author submissions. **Creaser (2010)** also opines that author unawareness is one of the causes of low submissions to IRs. However, **Grgic and Barbaric (2011)** research a greater interest and awareness of IRs and their benefits in Croatia where the repository number is low. Financial constraints and legal issues as the main constraints in submitting research to IRs have been reported by **Nneka Eke (2011)**. "IR awareness, alignment of deposits with existing workflows, and provision of value-added services" have been considered as the important motivators for self-archiving **(Covey, 2011)**. Covey also feels that issues related to copyright and publisherpolicies are the main hindrances that hamper the archiving of scholarly content to IRs. **Singeh, Abrizah and Karim (2013)** have studied the impact of self-archiving on the research performance and personal gains of the authors in terms of visibility, wider dissemination, and an increased reputation as a scholar. **Nicholas, Rowlands, Watkinson, Brown, Russell & Jamali (2013)** have also studied the goals and impact of IRs which mirror the findings conducted by **Dubinsky (2014). Dubinsky (2014)** holds IR administrators responsible for marketing and promoting IRs and also reflects their catalytic role in promoting the purpose and benefits of IRs. **Bamigbola (2014)** reveals an adequate level of awareness regarding the use of IRs but they reflect a variation in the awareness levels of authors. Bamigbola also reveals that most of the respondents don't know how to deposit their works on the IR of their university and were not conversant with their IRs. University libraries and colleagues tend to be the main sources of awareness of IRs. Among other challengeswere "lack of awareness of IR, epileptic power supply in the country, fear of not being able to publish works submitted in IR, fear of plagiarism, ignorance of publishers' policy". **Yang and Li (2015)** have also researched the lack of awareness and the deposit process; copyright & publisher policies and perception of lower quality less prestigious items in the IRs as the main barriers in IR participation. Lower awareness about IRs is also researched by **Kim (2007)**. Kim realized that publicity on a university/library website; "contact from an IR staff member, presentation by an IR staff member at a faculty meeting, publicity through campus newspapers, results of a web search engine, and participation in an initial meeting of the IR are the main sources of awareness of IRs. Kim also witnesses that the authors who archive their content in IRs agree with the beneficial factors more strongly incomparison to those who don't archive which includes "increase in (1) the chance to communicate research findings to peers, (2) potential impact of research work, (3) larger readership, and (4) an altruistic impetus for making research work accessible to other researchers".

Preservation, usage status, academic recognition, and retaining copyright were the most important factors motivating an author to self-archive. However, having a review of the submitted content and getting financial rewards were considered the least important motivators. **Kim (2010)** in a follow-up study signifies that the "significant factors to self-archiving include altruism, the self-archiving culture, copyright concerns, technical skills and age, impact of self-archiving on tenure and promotion, and the impact of self-archiving upon existing workflows". **Kim (2011)** while reviewing faculty self-archiving motivations within IRs found that they are "affected by accessibility both for archived content to be accessible to others and as a form of scholarly communication with peers, altruism, trust, and copyright concerns". **Nicholas, Rowlands, Watkinson, Brown and Jamali (2012)** have found "unawareness, lack of knowledge, lack of time and inclination, fear of copyright and publishers' policies, unconvinced that there is any personal benefit, the perception that repositories contain second-rate material and fear of plagiarism" as the main challenges authors face while using an IRs. The majority of the respondents populate their IRs voluntarily followed by those who feel it as a mandate from their institution and the ones invited by the publishers to do so. Repositories themselves, co-authors, colleagues, and funders also score in a promising range. However, the suggestion from a student scores very low. They also have found that submitting research to IRs increases the visibility of the research work, reduces the time between discovery and dissemination, provides better services to the researchers outside their institutions, enhances long-term preservation of the institutional scholarly content, provides better services to the students within institutions, helps in registration of new ideas, increases the citability of digital materials, contributes to the reform of scholarly communication and publishing, changes the library culture towards a more digital culture, enhances the external prestige of an institution, and maintains control over the institutions capital. Regarding the challenges, the authors have found that the variable quality of materials in repositories and insecurity over their long-term viability are the two main gripes that stand out from the rest of the challenges. However, confusion caused by different versions of the same material, fear of plagiarism, lack of awareness by users, confusion and uncertainty over copyright issues, lack of interoperability between repositories, fragmentation of access points to the literature, escalating costs of long-term preservation and digital curation technologies, lack of critical scale and critical mass, difficult to use software, the threat to the business models of society and commercial publishers are the challenges faced by the authors before populating their scholarly content in the IRs.

Dawson and Yang (2016) have researched the factors driving the authors to submit their works of IRs. They found that it helps to promote the reputation of an institution, "promotes the dissemination and use of scholarly works and citations for authors". **Serrano-Vicente, Melero, and Abadal (2016)** while researching on the awareness and use of IRs found that the services offered by the repository were generally perceived positively ranging from academic reward to professional recognition. **Bangani (2018)** view an increased citability and viewership of the content submitted to IRs. The views of the scholarly content submitted reflect commendable academic and societal impacts.

Conclusion

To conclude, it is evident that OAIRs have been researched by scientists from the times they made their debut. The status of the OAIRs is studied often which clearly shows a growing trend in accepting this self-archiving mode by the scholarly community for reaping enormous academic benefits from wider visibility to an enhanced impact. Researchers all across the globe make use of it for giving a new life to the content which was otherwise governed by countless hurdles.

References

Abrizah, A., Noorhidawati, A., & Kiran, K. (2010). Global visibility of Asian universities' Open Access institutional repositories. *Malaysian Journal of Library & Information Science*, *15*(3), 53-73. Retrieved from: https://ejournal.um.edu.my/index.php/MJLIS/article/view/6942/4603

Ahmed, A., Alreyaee, S., & Rahman, A. (2014). Theses and dissertations in institutional repositories: An Asian perspective. *New Library World*, *115*(9– 10), 438–451. DOI:10.1108/NLW-04-2014-0035

Ahmed, F., & Rather, R. (2007). Open access digital repositories: An Indian scenario. *KnowGenesis: International Journal for Technical Communication, 2* (1), 16-20. Retrieved from:https://core.ac.uk/download/pdf/19331995.pdf

Ali, S., Jan, S., & Amin, I. (2013). Status of Open Access Repositories: A Global Perspective. *International Journal of Knowledge Management & Practices.1*(1), 35-42.

Bamigbola, A. A. (2014). Surveying Attitude and Use of Institutional Repositories (IRs) by Faculty in Agriculture Disciplines: A Case Study. *Procedia - Social and Behavioral Sciences, 147*, 505-509. DOI: 10.1016/j.sbspro.2014.07.145

Bangani, S. (2018). The impact of electronic theses and dissertations: A study of the institutional repository of a university in South Africa. *Scientometrics, 115*(1), 131-

151. DOI:10.1007/s11192-018-2657-2

Bhat, M. H. (2009). Open Access Repositories in Computer Science and Information Technology: An evaluation. *IFLA Journal, 35*(3), 243–257. DOI:10.1177/0340035209346210

Bhat, M. H. (2014). Exploring research data in Indian institutional repositories. *Program, 48*(2), 206–216. DOI:10.1108/prog-07-2012-0036

Brown, D. J., & Boulderstone, R. (2008). *The Impact of Electronic Publishing: The Future for Publishers and Librarians* (p.180). Munchen: K.G. Saur.

Burns, C. S., Lana, A., & Budd, J. M. (2013). Institutional Repositories: Exploration of Costs and Value. *D-Lib Magazine, 19*(1/2). DOI:10.1045/january2013- burns

Christian, G. E. (2008). *Issues and challenges to the development of open access institutional repositories in academic and research institutions in Nigeria.* International Research and Development Centre (IDRC) Ottawa, Canada. Retrieved from: http://idlbnc.idrc.ca/dspace/bitstream/10625/36986/1/127792.pdf

Cocciolo, A. (2010). Can Web 2.0 enhance community participation in an institutional repository? The case of PocketKnowledge at Teachers College, Columbia University. *The Journal of Academic Librarianship*, *36*(4), 304- 312. DOI: 10.1016/j.acalib.2010.05.004

Covey, D. T. (2011). Recruiting content for the institutional repository: The barriers exceed the benefits. *JODI: Journal of Digital Information, 12*(3), 1–18 Retrieved from: https://journals.tdl.org/jodi/index.php/jodi/article/view/2068/1757

Creaser, C. (2010). Open access to research outputs—Institutional policies and researchers' views: Results from two complementary surveys. *New Review of Academic Librarianship, 16*(1), 4–25. DOI:10.1080/13614530903162854

Cullen, R., & Chawner, B. (2011). Institutional repositories, open access, and scholarly communication: A study of conflicting paradigms. *Journal of Academic Librarianship, 37*(6), 460–470. DOI: 10.1016/j.acalib.2011.07.002.

Dawson, P. H., & Yang, S. Q. (October 01, 2016). Institutional Repositories, Open Access and Copyright: What Are the Practices and Implications? *Science and Technology Libraries, 35* (4), 279-294. DOI:10.1080/0194262X.2016.1224994

Dubinsky, E. (2014). A current snapshot of institutional repositories: Growth rate, disciplinary content and faculty contributions. *Journal of Librarianship & Scholarly Communication, 2*(3), 1–22. DOI:10.7710/2162-3309.1167

Earnshaw, R. A., & Vince, J. (2007). *Digital Convergence: Libraries of the Future*. London: Springer.

Elahi, M.H., & Mezbah-ul-Islam, M. (2018). Open access repositories of Bangladesh: An analysis of the present status. *IFLA Journal*, 44 (2), 132– 142. DOI:10.1177/0340035218763952

Ezema, I. F., & Okafor, V. N. (2015). Open access institutional repositories in Nigeria academic libraries: Advocacy and issues in scholarly communication. *Library Collections, Acquisitions, and Technical Services, 39*(3–4), 45–58. DOI:10.1080/14649055.2016.1176842

Fernandez, L. (2006). Open Access Initiatives in India - An Evaluation. *Partnership: The Canadian Journal of Library and Information Practice and Research*, *1*(1). DOI:10.21083/partnership. v1i1.110

Ghosh, M. (2009). E-theses and Indian academia: A case study of nine ETD digital libraries and formulation of policies for a national service. *International Information & Library Review, 41*(1), 21–33. DOI:10.1080/10572317.2009.10762794

Grgic, I. H., & Barbaric, A. (2011). The future of open access in Croatia: A survey of academic and research libraries. *Library Review, 60*(2), 155–160. DOI:10.1108/00242531111113096

Joint, N. (2006). Institutional repositories, self-archiving and the role of the library. *Library Review*, *55*(2), 81–84. DOI:10.1108/00242530610649576

Jones, C. (2007). *Institutional Repositories: Content and Culture in an Open Access Environment*. Oxford: Chandos.

Jones, B. M., & American Library Association (2009). *Protecting Intellectual Freedom in your Academic Library: Scenarios from the Front Lines* (P.93). Chicago, IL: American Library Association.

Kamraninia, K., & Abrizah, A. (2010). Librarians' role as change agents for institutional repositories: A case study of Malaysian academic libraries. *Malaysian Journal of Library & Information Science*, *15*(3), 121–133. Retrieved from: https://ejournal.um.edu.my/index.php/MJLIS/article/view/6946

Kim, J. (2007). Motivating and impeding factors affecting faculty contribution to institutional repositories. *JODI: Journal of Digital Information, 8*(2), 7–7. Retrieved from: https://journals.tdl.org/jodi/index.php/jodi/article/view/193/177

Kim, J. (2010). Faculty self-archiving: Motivations and barriers. *Journal of the American*

Society for Information Science & Technology, 61(9), 1909–1922. DOI:10.1002/asi.21336

Kim, J. (2011). Motivations of faculty self-archiving in institutional repositories. *Journal of Academic Librarianship, 37*(3), 246–254.DOI: 10.1016/j.acalib.2011.02.017

Kim, S., & Lee, W. (2014). Global data repository status and analysis: Based on Korea, China and Japan. *Library Hi Tech, 32*(4), 706–722. DOI:10.1108/lht- 06-2014-0064

Li, Y., & Banach, M. (2011). Institutional repositories and digital preservation: Assessing current practices at research libraries. *D-Lib Magazine*, *17*(5–6). DOI:10.1045/may2011-yuanli

Littlejohn, A., & Pegler, C. (2007). *What is Blended E-Learning? Preparing for Blended E-Learning* (P.9). London: Routledge.

Livingston, B. (2010). *Using Web 2.0 Technologies, American Society for Training & Development* (P.7). Alexandria, VA.

Loan, F. A. (2014). Open Access Digital Repositories in Asia: Current Status and Future Prospects. *International Journal of Information Science and Management,12* (2), 35-45. Retrieved from:https://ijism.ricest.ac.ir/index.php/ijism/article/view/389/222

Lone, F. A., Rather, R. A., & Shah, G. J. (2008). Indian Contribution to Open Access Literature: A Case Study of DOAJ & OpenDOAR. *Chinese Librarianship: An International Electronic Journal*, *26*. Retrieved from: http://www.iclc.us/cliej/cl26.htm

Loan, F. A., & Sheikh, S. (2016). Analytical study of open access health and medical repositories. *The Electronic Library, 34*(3), 419–434. DOI:10.1108/el-01-2015-0012

Megrey, B. A., & Moksness, E. (2009). *Computers in Fisheries Research* (p.47). Netherlands, Dordrecht: Springer.

Mendes, N. F. M., & Brasileiro, F. V. (2007). *Advances in Computer-Supported Learning* (p. 203). Hershey, PA: Information Science Pub.

Mittal, R., & Mahesh, G. (2008). Digital libraries and repositories in India: An evaluative study. *Program*, *42*(3), 286–302.DOI:10.1108/00330330810892695

Nicholas, D., Rowlands, I., Watkinson, A., Brown, D., & Jamali, H. R. (2012). Digital repositories ten years on: What do scientific researchers think of them and how do they use them? *Learned Publishing*, *25*(3), 195–206. DOI:10.1087/20120306

Nicholas, D., Rowlands, I., Watkinson, A., Brown, D., Russell, B., & Jamali, H. R. (2013). Have digital repositories come of age? The views of library directors.

Webology, *10*(2). DOI:10.1108/LHTN-05-2014-0038

Nneka Eke, H. (2011). Digitizing resources for university of Nigeria repository: Process and challenges. *Webology,* *8*(1), 1–19. Retrieved from: http://www.webology.org/2011/v8n1/a85.html

Nwokedi, V. C. (2010). Nigerian University academics and institutional repository: A case study of University of Jos, Faculty of Natural Sciences Lecturers. *An International Journal of Information and Communication Technology (ICT).,* *7*(2), 137–146. DOI:10.4314/ict. v7i2.65650

Nyambi, E., & Maynard, S. (2012). An investigation of institutional repositories in state universities in Zimbabwe. *Information Development,* *28*(1), 55–67. 10.1177/0266666911425264

Owen, T. M. (2011).). Evolution of a digital repository: One institution's experience. *Journal of Electronic Resources Librarianship,* *23*(2), 142–149. DOI:10.1080/1941126X.2011.576959

Ozek, Y. H. (2011). Implementing Web 2.0 design patterns in an institutional repository may increase community participation. *Evidence Based Library and Information Science Practice*, *6*(3), 74-76. DOI:10.18438/B8633S

Pinfield, S., Salter, J., Bath, P. A., Hubbard, B., Millington, P., Anders, J. H. S., & Hussain, A. (2014). Open-access repositories worldwide, 2005-2012: Past growth, current characteristics, and future possibilities. *Journal of the Association for Information Science and Technology*, *65*(12), 2404-2421. DOI:10.1002/asi.23131

Primary Research Group. (2008). *The International Survey of Institutional Digital Repositories* (p.27). New York (NY): Primary Research Group.

Raju, R., Raju, J., & Claassen, J. (2015). Open scholarship practices reshaping South Africa's scholarly publishing roadmap. *Publica,* *3*(4), 263–284. DOI:10.3390/publications3040263

Rodríguez Bravo, B., & Luisa Alvite Díez, M. (2007). E-science and open access repositories in Spain. *OCLC Systems & Services: International Digital Library Perspectives*, *23*(4), 363–371. DOI:10.1108/10650750710831501

Roy, B. K., Biswas, S. C., & Mukhopadhyay, P. (2013). Global Visibility of Indian Open Access Institutional Digital Repositories. *International Research: Journal of Library & Information Science, 3*(1), 182-194. Retrieved from: http://irjlis.com/wp-content/uploads/2013/07/13_IR096.pdf

Serrano-Vicente, R., Melero, R., & Abadal, E. (2016). Open Access Awareness and

Perceptions in an Institutional Landscape. *The Journal of Academic Librarianship, 42* (5), 595-603. DOI: 10.1016/j.acalib.2016.07.002

Shafi S. M., Gul, S., & Shah, T. A. (2013). Web 2.0 interactivity in open access repositories. *The Electronic Library*, *31*(6), 703-712. DOI:10.1108/EL-08- 2011-0121

Shueb, S., & Sofi, R. (2014). Web 2.0 Interactivity in Open Access (OA) Repositories: An Analysis. *Journal of Library and Information Sciences*, *2*(1), 29-38. Retrieved from: http://jlisnet.com/journals/jlis/Vol_2_No_1_March_2014/4.pdf

Sicilia, M. A., & Lytras, M. D. (2009). *Metadata and Semantics*. US: Springer.

Singh, P. (2016). Open access repositories in India: Characteristics and future potential. *IFLA Journal, 42*(1), 16-24. DOI:10.1177/0340035215610131

Singeh, F. W., Abrizah, A., & Karim, N. H. A. (2013). Malaysian authors' acceptance to self-archive in institutional repositories: Towards a unified view. *The Electronic Library*, *31*(2), 188-207. DOI:10.1108/02640471311312375

Tripathi, M., & Jeevan, V. K. J. (2011). An Evaluation of Digital Libraries and Institutional Repositories in India. *The Journal of Academic Librarianship*, *37*(6), 543–545. DOI: 10.1016/j.acalib.2011.08.012

Ukwoma, S. C., & Okafor, V. N. (2017). Institutional Repository in Nigerian Universities: Trends and Development. *Library Collections, Acquisitions, & Technical Services*, *40*(1-2), 46–57. DOI:10.1080/14649055.2017.1331653

Van Westrienen, G., & Lynch, C. A. (2005). Academic institutional repositories: Deployment status in 13 nations as of mid 2005. *D-Lib Magazine*, *11*(9), 1–11. DOI:10.1045/september2005-westrienen

Wani, Z. A., Gul, S., & Rah, J. A. (2009). Open Access Repositories: A Global Perspective with an Emphasis on Asia. *Chinese Librarianship: an International Electronic Journal, 27*. Retrieved from: http://www.iclc.us/cliej/cl27.htm

Wacha, M., & Wisner, M. (2011). Measuring Value in Open Access Repositories. *The Serials Librarian, 61*(3-4), 377–388.DOI:10.1080/0361526x.2011.580423

Weenink, K., Waaijers, L. J. M., Godtsenhoven, K., DRIVER (Project: Europe)., & Stichting SURF (2008). *A DRIVER's Guide to European Repositories*. Amsterdam: Amsterdam University Press.

Wood, M. S. (2007). *Medical Librarian 2.0: Use of Web 2.0 Technologies in Reference Services* (P.135). Binghamton, NY: Haworth Information Press.

Xia, J., & Opperman, D. B. (2010). Current Trends in Institutional Repositories for

Institutions Offering Master's and Baccalaureate Degrees. *Serials Review*, *36*(1), 10-18. DOI:10.1080/00987913.2010.10765272

Yang, Z.Y. (Lan). & Li, Y. (2015). University Faculty Awareness and Attitudes towards Open Access Publishing and the Institutional Repository: A Case Study. *Journal of Librarianship and Scholarly Communication. 3*(1), p. eP1210. DOI:10.7710/2162-3309.1210